

Nurses' Corner

Swimming Pool Safety

Lisa Lowe RN, BSN

With summer, crowds of beachgoers and those looking for ways to cool off from the hot summer heat are increased. Many families take trips to recreational water parks. Did you know that the water in those recreational swimming pools isn't completely safe?

Inadequate chemical cleaning allows potentially dangerous germs to thrive in the water. When those germs get on or into your body, they can cause recreational water illness (RWI), which is responsible for gastrointestinal issues such as diarrhea, skin problems, and ear and eye infections. The germ, *Cryptosporidium* (Crypto), which is a leading cause of RWI can actually survive for several days in properly chlorinated water. The most dangerous of those RWIs are caused by germs that are "transmitted by the fecal-oral route."

Chlorine does a good job of keeping pool water clean, but only when it's used correctly. Highly chlorinated water can dry out the skin and irritate the eyes, and a lot of public pools have cut back on the amount of chlorine they use. Some have also switched to non-chlorine disinfectants, including a special type of salt that turns into a healthier chlorine-like chemical. Those methods aren't as toxic, but they aren't as effective either. This poses a major problem.

The only way for RWI-causing germs to enter a swimming pool is by human transmission to (either put them there via a "diarrheal or fecal incident" or by not taking a thorough pre-swim shower). According to the CDC, the average person has .14 grams of fecal matter on their bottom (and kids often have 50 times that much). This particular amount may not seem like a lot, but is when multiplied by the thousands of people who use a public pool every day. Consider how much is getting into your mouth! *How much pool water do kids put in their mouths during play?*

Below are a few tips to help determine if your local public pool is clean and safe for the family

- Are you observing a harsh chlorinated smell? That harsh chlorine smell might seem like a good sign—more chlorine equals less disease, right? Yes, but a properly treated pool doesn't smell. That chlorinated odor is actually the byproduct of contaminants including sweat, sunscreen, urine, and feces reacting with the chlorine. The stronger the smell, the more contaminated the water.
- Do Swimmers have red eyes? It's not chlorine that irritates the eyes, it's that same chemical byproduct of chlorine with other unwanted matter, especially human urine
- Feel the tiles. Smooth is good. Slimy is a sign of dirty, contaminated water.
- Are there babies in swim diapers? Anyone who has ever had a baby has seen plenty of explosive diaper blowouts. When a diaper falls in a swimming pool, the risk for fecal transmission and RWI greatly increases!

www.cdc.org